

REMARKS/ARGUMENTS

The specification and drawings have been correspondingly amended without adding new matters and will be explained as below.

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As shown in the amended FIGS. 6, 7 and 9, symbol 29 is a projection of the connection material tape 28. Symbols 41 and 42 are first and second ends of the connection 40. These features have been originally shown in the drawings and are thus added to make the invention clearer.

10 Symbol 43 is a to-be-broken portion connected to the projection 29 of the connection material tape 28. The terminal 30 of the original FIG. 7 is finally broken into the terminal 30 of the original FIG. 9 at the to-be-broken portion 43. So, the to-be-broken portion 43 is added without adding any new matter.

15 Also, in the original FIGS. 6 and 7, the to-be-broken portion 43 is formed with a cutting mark (indicated by lines at the to-be-broken portion 43) to facilitate separating the terminal 30 from the connection material tape 28. If no cutting mark is originally shown in FIGS. 6 and 7, no line should appear at the to-be-broken portion 43. So, the cutting mark is added without adding any new matter.

20 In order to explain the amended claim 1 clearly, symbols will be added.

Claim 1: A terminal structure of an electrical connector, the terminal structure having continuous terminals (30) and a connection material tape (28) with projections (29) respectively connected to the continuous terminals (30),
25 which are formed by pressing a metal plate, each of the terminals (30) comprising:
 an extension (31) having a first end (32) and a second end (33);
 a connection (40) having a first end (41) connected to the first end (32) of the extension (31), and a second end (42) formed with a to-be-broken portion (43) connected to the projection (29) of the connection material tape (28), wherein the
30 to-be-broken portion (43) is broken to separate the terminal (30) from the connection material tape (28); and

a contact (44) connected to the second end (33) of the extension (31), wherein the contact (44) has two elastic arms (45) with a gap therebetween, and the two elastic arms (45) have contact surfaces (47) close to each other,

wherein the extension (31) is horizontal and has a twisted portion (38) to
5 make the contact (44) vertical so that the two contact surfaces (47) of the contact (44) may contact an inserted male terminal (17) in vertical directions.

In the amended claim 1, the to-be-broken portion 43 is disposed between the twisted portion 38 and the material tape 28. In 5,009,618 patent, however, the
10 twisted portion 119 is disposed between the to-be-broken portion (115 or near 115) and the material tape 117, as shown in FIGS. 23 and 24. The to-be-broken portion (115 or near 115) of the '618 patent can be easily found and clearly defined by comparing FIG. 22 to FIG. 24. The terminal is not connected to the material tape 117 in FIG. 22, while the terminal is connected to the material tape 117 in FIG. 24.
15 So, one of ordinary skill in the art may easily understand that the terminal is separated from the material tape when the to-be-broken portion is broken.

In detail, the claimed invention is different from the '618 patent in the following aspects.

Before the explanation, it is assumed that the contact 91 is disposed at a front
20 end, and the material tape 117 is disposed at a rear end, as shown in FIGS. 23 and 24 of the '618 patent. According to the same rule, the contact 44 is disposed at a front end, and the material tape 28 is disposed at a rear end, as shown in FIGS. 6, 7 and 9 of this invention.

Thus, the to-be-broken portion (115 or near 115) is disposed **in front of** the
25 twisted portion 119, and the twisted portion 119 substantially pertains to the projection (the arm portion or the examiner's admitted connection) 118 (FIGS. 23 and 24) of the material tape (band portion) 117. Thus, the overall terminal is twisted into a vertically state while the material tape 117 is in a horizontal state.

In this invention, however, the to-be-broken portion 43 is disposed **in back**
30 **of** the twisted portion 33, and the twisted portion 33 is formed on the extension 31 of the terminal. Thus, the overall terminal is not twisted into the vertical state, but

only the contact 44 of the terminal is twisted into the vertical state perpendicular to the extension 31 or the connection 40 in the horizontal state.

5 In the '618 patent, the overall terminal is twisted into the vertical state, so the to-be-broken portion 115 is also twisted into the vertical state. Thus, the to-be-
broken portion 115 connected to the projection 118 of the material tape 117 has to
be pre-cut by a deeper depth such that the width of the to-be-broken portion 115
becomes narrower in order to facilitate separating the terminal from the material
tape 117 because a vertical breaking force is applied (the horizontal breaking force
cannot be applied easily). For example, a horizontal wood plate can be easily
10 broken by a vertical breaking force, while a vertical wood plate cannot be easily
broken by the vertical breaking force.

In this invention, the twisted portion 33 is disposed on the extension 31 of
the terminal, and the twisted portion 33 is disposed in front of the connection 40.
Thus, when the twisted portion 33 is formed, the to-be-broken portion 43 at one
15 end of the connection is still horizontal and the contact 44 is vertical. Therefore,
the cutting mark does not have to be pre-cut deeper, and a larger width of the to-
be-broken portion 43 connected to the projection 29 of the material tape 28 is still
kept, and the terminal may be connected to the material tape more stably.

20 Finally, when the terminal is separated from the material tape at the to-be-
broken portion, the terminal of the '618 patent has no twisted portion, while the
terminal has a twisted portion at the extension. So, the claimed invention is
completely different from the '618 patent. Also, the '618 patent and APA never
teach that the to-be-broken portion can be disposed between the twisted portion
and the material tape. Consideration of the amended claim 1 is therefore politely
25 requested.

Claims 2, 3, 5, 6, and 7 depend on the amended claim 1. Consideration of the claims, upon the allowance of claim 1, is therefore politely requested.

Claim 4 is amended to depend on claim 1.

Claim 8 is cancelled.

Claim 9 is added to state that the to-be-broken portion is formed with a cutting mark to facilitate separating the terminal from the connection material tape.

As explained in the amendment in the specification, the cutting mark is originally illustrated by lines at the to-be-broken portion 43. Consideration of the newly added claim 9 is therefore politely requested.

In light of the above-mentioned amendments and remarks, Applicant now asserts that all of the grounds for rejection have been traversed or overcome by amendments, and that all of the present claims are in condition for immediate allowance. Applicant therefore requests reconsideration of the objections and rejections, and solicits allowance of the present claims at an early date.

Thank you for your consideration.

Respectfully submitted,

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Amendments to the Drawings:

The attached sheets labeled "Replacement Sheet" drawings include changes to FIGS. 6 and 7 and 9.

5 In the amended FIGS. 6, 7 and 9, symbols 29, 41, 42, and 43 are added.

Symbol 29 is a projection of the connection material tape 28. Symbol 41 is a first end of the connection 40. Symbol 42 is a second end of the connection 40. Symbol 43 is a to-be-broken portion connected to the projection 29 of the connection material tape 28. These features have been originally shown in the
10 drawings and are thus added to make the invention clearer.